

# 2011-14 Ford Mustang GT V8-5.0L, 1 3/4" Shorty Headers 12131FLT (Raw Finish) & 12132FLT (Polished Finish)

## **Installation Instructions**

Thank you for making FLOWTECH EXHAUST your choice in a high-performance exhaust system. Extensive dyno/track testing has enabled FLOWTECH to offer the most advanced design in exhaust systems. The installation, while not complex, will take a certain amount of time. However, the additional horsepower and improved performance will more than justify your efforts. Proper installation and maintenance will ensure long life and maximum performance from your FLOWTECH EXHAUST system.

#### **BEFORE STARTING:**

Your vehicle must be raised a minimum of 36 inches. A floor hoist is ideal. If no hoist is available, we strongly urge the use of axle stands as a safety measure. Please read these instructions in their entirety before attempting installation.

CAUTION! WORK ONLY ON A LEVEL SURFACE. USE JACKS /JACKSTANDS OF SUFFICIENT CAPACITY TO LIFT AND SUPPORT YOUR VEHICLE. NEVER WORK UNDER A VEHICLE SUPPORTED BY A FLOOR OR BUMPER JACK.

## **INSTALLATION:**

- 1. Disconnect the negative cable from the vehicle battery. Lift the vehicle and secure on jack stands.
- 2. Remove the (x3) 8mm head bolts securing the oil service belly pan to the chassis.
- 3. Loosen the left and right side OE ball and socket connection clamps securing the X-pipe to the catalytic converters.
- 4. Loosen the band clamps securing the X-Pipe to the exhaust mid pipe. Remove the X-pipe.
- 5. Remove the (x2) left and right side post-O2 sensors secured to the OE catalytic converters.
- 6. Remove (x4) 15mm head nuts securing the center cross brace (Figure 1) from the chassis and remove the cross brace.



Figure 1

7. Remove (x4) 15mm head nuts securing the left and right side catalytic converters to the OE exhaust manifolds and then remove the catalytic converters.

- 8. Remove the (x2) left and right side pre-O2 sensors.
- 9. Using an engine support bar to hold the engine, remove (x3) 13mm head bolts, (x1) 13mm head nut, and (x1) 15mm head nut supporting the left side engine mount to the motor and chassis.



Figure 2

- 10. Repeat step 9 on the right side by removing (x2) 13mm head bolts, (x2) 13mm head nuts, and (x1) 15mm head nut supporting the right side engine mount to the motor and chassis.
- 11. Remove the steering shaft by removing (x2) 13mm head bolts at the end and (x1) 13mm head bolt at the top.
- 12. Remove (x1) 10mm and (x1) 13mm head nut securing the wires to the starter. Remove (x3) 10mm head bolts securing the starter to the motor. Remove the starter.
- 13. Remove (x8) 15mm nuts securing the left side OE exhaust manifold to the engine. Remove the (x8) studs using an E8 Torx® socket and then remove the OE exhaust manifold. Set the gasket aside as it will be re-used.

NOTE: Some will have to be accessed from under the vehicle and some under the hood.

14. Remove (x8) 15mm nuts securing the right side OE exhaust manifold to the engine. Remove the (x8) studs using an E8 Torx® socket and then remove OE exhaust manifold. Set the gasket aside as it will be re-used.

NOTE: Some will have to be accessed from under the vehicle and some under the hood.

15. Ensure that the gasket removed from step 13 is not damaged and free from any dirt/debris (replace, if necessary). Install the Flowtech left side shorty header using the (x8) OE flange bolts and then tighten starting with the middle and working out. This will require the motor to be raised to guide the header up and past the transmission case.

**NOTE:** It is important to distinguish if your motor accepts either the M10 x 1.25 or M10 x 1.50 flange bolts. This depends on the year of the vehicle.

- 16. Ensure that the gasket removed from step 13 is not damaged and free from any dirt/debris (replace, if necessary). Install the right side OE catalytic converter to the Flowtech shorty header on a workbench and off the vehicle using the original nuts and tighten.
- 17. Ensure that the gasket removed from step 14 is not damaged and free from any dirt/debris (replace if necessary). Install the Flowtech right side shorty header using the (x8) OE flange bolts and then tighten starting with the middle and working out. This will require the motor to be raised to guide the header up and past the transmission case.

**NOTE:** It is important to distinguish if your motor accepts either the M10 x 1.25 or M10 x 1.50 flange bolts. This depends on the year of the vehicle.

- 18. Now install the left and right side pre-O2 sensors and tighten.
- 19. Using the original hardware from step 9 and 10, install the left and right side motor mounts and tighten.
- 20. Ensure that the gasket removed from step 7 is not damaged and free from any dirt/debris (replace, if necessary). Install the left side OE catalytic converter using the original nuts and tighten.
- 21. Using the original hardware from step 12, secure the starter back onto the motor and wires back to the starter and tighten.
- 22. Using the original hardware removed from step 11, install the steering shaft and tighten.
- 23. Install the (x2) post-O2 sensors and tighten.
- 24. Using the original hardware from step 6, secure the center cross brace back onto the chassis and tighten.
- 25. Using the original hardware from step 2, install the oil service belly pan back onto the chassis and tighten.
- 26. Using the original hardware from step 3 and 4, secure the OE X-Pipe back onto the catalytic converters and mid pipes and tighten.
- 27. Connect the battery, start the engine, and check for leaks.
- 28. Re-check your work.
- 29. Remove jack stands and lower vehicle.
- 30. After 150 miles, re-check and tighten all bolts and clamps.

NOTE: It is normal for the Flowtech Shorty Headers to emit smoke for the first few minutes of operation.

#### **LIMITATION OF LIABILITY - DISCLAIMER:**

The regulation of emissions production, noise levels, and safety standards is undertaken by the federal government, each of the fifty state legislatures, and by many local municipalities, towns, and counties.

FLOWTECH™ makes no warranties of merchantability, of fitness for particular purpose, or that its products are approved for general use, or that its products comply with laws, regulations, or ordinances in the state where they may be sold to the ultimate purchaser, the consumer.

Unless expressly stated to the contrary in the catalog, instruction sheet; or price list, the entire risk as to the conformity of any company product in any such state and as to repair should the product prove to be defective or non-conforming, is on the retail purchaser, the buyer, the ultimate consumer, of such product and it is not upon the seller, distributor, or manufacturer.

In this connection, the retail purchaser, the buyer, the ultimate consumer assumes the burden of the entire cost of any and all necessary service, alterations, or repair.

## THE FOREGOING STATEMENT LIMITS THE LIABILITY OF THE MANUFACTURER.

California vehicle code, sections 27156 and 38391, prohibits the advertising, offering for sale, or installation of any device, which modifies a vehicle's emission control system, unless exempted, unless otherwise noted. FLOWTECH™ Headers that have not received an Executive Order (E.O.) exemption from these code sections are not legal for sale or use in California on vehicles originally equipped with catalytic converters, except for racing vehicles, which may never be driven upon a highway. Check with your local authorities to determine if these headers are legal for use in your particular area.

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